

SUPERFUND

Fact Sheet

UNITED CHROME PRODUCTS, INC.
Corvallis, Oregon



U.S. ENVIRONMENTAL PROTECTION AGENCY

September 2000

Beginning in mid-September 2000, the City of Corvallis will remove approximately 1,000 cubic yards of chromium-contaminated soil from the former United Chrome Products site. This removal is expected to reduce the amount of chromium in soil which could leach into groundwater. This will speed the overall cleanup and provide increased confidence that cleanup goals can be maintained in the future after all active cleanup measures are completed. Weather permitting, the removal will be completed by early October 2000.

Groundwater Cleanup Progress To Date

The groundwater extraction and treatment systems have removed more than 32,000 pounds of chromium from the groundwater. The upper zone groundwater system has now operated for twelve years and the deep aquifer system has operated for nine years. A total of 60 million gallons of contaminated groundwater from the upper and deep zones have been removed to date. Average chromium concentrations in the upper zone have been reduced by 99 percent, from approximately 2,000 parts per million (ppm) to 11 ppm. All but six of the 23 upper zone groundwater extraction wells have met the 10 ppm cleanup goal. The cleanup goal of 0.1 part per million for the deep groundwater has been achieved in all but one extraction well.

Despite the success of groundwater cleanup to date, the rate of chromium removal from the upper zone has declined and chromium concentrations in the deep aquifer have actually increased over the past several years. As chromium levels in groundwater continue to decline, it becomes more difficult to remove the remaining small amounts of chromium. Also, EPA suspects chromium is continuing to leach into groundwater from contaminated soil which was not removed in 1987.

Background

United Chrome Products was an industrial hard chrome plating company that operated on property leased from the City of Corvallis at the Corvallis Airport Industrial Research Park. Between 1956 and 1985, leaks from plating tanks at this site and some leaching from a disposal pit released large amounts of hexavalent chromium into the soil, the shallow groundwater (upper zone), and the deep aquifer. These high levels of chromium contamination posed a threat to public health and the environment. Consequently, in September 1984, EPA placed United Chrome on its National Priorities List of Superfund sites. The company stopped operating in 1985.

In December 1987, EPA began extensive cleanup activities at the site. Cleanup actions included removing contaminated materials and the most hazardous soil, re-routing a drainage ditch around the site, and installing a groundwater extraction and treatment system. Since 1988, the city of Corvallis has been operating the groundwater extraction and treatment system under legal agreements with EPA. Contaminated groundwater is pumped from extraction wells and piped to the Corvallis wastewater treatment plant. In July 1992, the U.S. District Court, EPA, the state of Oregon, and the City of Corvallis signed a consent decree which legally binds the City to continue groundwater extraction at the site until cleanup goals are met.

Soil Removal Expected to Speed Groundwater Cleanup

In August 2000, EPA completed a comprehensive soil investigation to determine the extent of chromium contaminated soil that is a source of groundwater contamination. Two areas of highly contaminated soil were found in the former plating tank and dry well areas of the site. Chromium concentrations beneath the former dry well area ranged from 23,200 ppm in the upper five feet of soil to 5,770 ppm between 15 and 20 feet below the ground. Near the former plating tank, soil chromium concentrations ranged from 11,000 ppm at a depth of 10 feet to 4,640 ppm at a depth of 20 feet.

EPA then tested the soils for their potential to leach chromium to groundwater. Because these soils are still leaching chromium, EPA and DEQ believe that 6,000 ppm of chromium in soil would be protective, and allow us to reach the cleanup goal for groundwater. If soil with chromium levels greater than 6,000 ppm

remains on site, EPA believes the groundwater cleanup goals may not be achieved for many more years. If these soils are removed, it is likely that groundwater cleanup goals can be met much sooner. An estimated 1,000 cubic yards of soil exceeds the 6,000 ppm chromium level and is slated to be removed.

What Happens Next?

The City of Corvallis has overall responsibility for the site cleanup. EPA must first approve the City's plans for the soil removal. The City has hired CH2M HILL as its design/build contractor. Contaminated soil will be excavated and moved by a subcontractor to an approved disposal facility in eastern Oregon. The City expects site work to start by mid-September and conclude by early October 2000. This schedule assumes dry weather; rainy weather could make handling the soil more difficult and cause the project to take longer to finish.

The City expects to use about five trucks with trailers per day to move the excavated soil to the disposal site. The planned truck route through the city is shown in the Figure below.

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North on Airport Place to Airport Road; east on Airport Road to Highway 99W; north on Highway 99 through the downtown area on 3rd Street to Van Buren Avenue; east on Van Buren Avenue to the Willamette River bridge, continuing east on Highway 34 to Interstate 5.



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The contractor will be required to decontaminate trucks and equipment as they leave the site and take measures to prevent loss of soil during transport. Clean backfill will be placed in the excavated areas.

After the soil removal is finished, the City will temporarily stop further pumping of groundwater while the City, EPA and DEQ monitor concentrations of chromium in groundwater over several months. If the groundwater cleanup goals still have not been met, EPA will revise the site pumping plan and require the City to resume groundwater pumping.

As more progress is made towards meeting the cleanup goals for the site, the agencies and the City will begin planning for site closeout activities and consider plans for the site's expected future land use.

For More Information

If you have questions about the soil removal, please call

Alan Goodman, EPA Project Manager
(503) 326-3685, or

Dan Hanthorn, City of Corvallis Project Manager
(541) 754-1757

If you have general questions about the site or would like to be included on the mailing list, please call

Debra Packard, EPA Community Involvement Coordinator
(206) 553-0247.

You may also call our toll free number:
1-800-424-4372

EPA strives to provide you with useful environmental information. Please feel free to call, write or e-mail us to let us know how we can improve our fact sheets to suit your needs.

You can e-mail Debra Packard at packard.debra@epamail.epa.gov.

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